## CHATTANOOGA FOREMOST FOUNDRY CITY OF SOUTH

Visitor Is Greeted by Weird Light of Flame Spout. ing Cupolas.

While Chattanooga's chief claim to stinction industrially has been the very distinction industrially has been the very wide variety of articles made in the city, giving rise to the expression that a man might build a house and furnish it throughout without having to go outside of the city to obtain a single element of construction or article of furnishing, the city is pre-eminent above all others in the south in one particular line of in-dustry.

duatry.

This is the foundry industry, and if anybody should be tempted to make the old remark about a jack-of-all-trades and good at none, the local man has but to point out Chattanooga's undisputed excellence in this line to gloriously refute

excellence in this line to gloriously refute him who made the remark.

While Chattanooga does not produce more iron from the ore than any other southern city, it does melt more iron than any other southern city, and that by a very large margin. There are thirty-eight foundries in Chattanooga utilizing pig iron in the making of a very wide range of articles, and some of these establishments are of remarkable proportions.

For instance, one of the largest plants of the United States Cast Iron Pipe and Foundry company is located in Chattaneoga. The plant consists of two parts. one on Boyce street, where heavy pipe is cast, and one on Whiteside street, where the fittings are made.

In the local pipe works several of the most important developments in the art of pit casting of pipe have been perfected, and it has been said that when the big corporation of which the local plant is a part has a particularly delicate job is a part has a particularly delicate job on hand, calling for the highest skill in workmanship, that job is sent to the

Chattanooga plant.

The United States company makes heavy pipes exclusively. One of the largest orders ever completed by that plant has been for the Argentine government, a job upon which the specifications were unusually exacting and the

spection close.

The Casey-Hedges company is perhaps the largest melter of iron in the south for the purpose of casting it into soil pipe and fittings. Its plant is one of the most modern in the industry, and its trade extends not only to this country, but to the Philippines, Cuba and other foreign countries.

But pipe, whether heavy or soil, is really a small item in the total of cast iron products made in Chattanooga. The gamut runs from the heaviest to the lightest castings. At the Wheland com-pany heavy engine beds and saw-mill parts are made. The Tennessee Stove works. engaged in making the lighter and thin-ner castings, while numberless foundries produce both heavy and light castings. In Chattanooga is located one of foremost malleable fron foundries in the country, and one of the very few south Ohio river, the working of mal leable being largely an industry devel-oped in the industrial sections of the northern states. This plant is part of the Ross-Meehan company, which also has a big gray iron foundry producing mainly railroad castings, and which also perates a very successful steel foundry.

Chattanooga-meited iron goes into the utermost corners of the earth in the shape of Chattanooga-made plows, the Chattanooga Plow company and the New-ell Sanders Plow company having been ploneers in the development of an efficient export organization. The Chattanooga Implement company, in East Chattanooga, also operates a large foundry for the manufacture of agricultural implements.

The Price-Evans Foundry company and the Gustafson Manufacturing company operate modern foundries, the latter mat-ing a special self-oiling wheel for the mine cars which it also manufactures. Another large foundry is that of the Co-lumbian Iron works, operated in connec-tion with its munition and pump plants.

Wagon parts are cast by the Chattanooga Skein and Foundry company. The American Brake Shoe and Foundry com-pany makes steel-bound brakeshoes for pany makes steel-bound brakeshoes for rallroads all over the country. The Chat-tanooga Roofing and Foundry company makes, in addition to numerous small items, a complete line of furnaces for heating homes, and operates a very mod-ern foundry. The Cahill Iron works ac-complishes one of the most difficult foun-dry tasks in the quantity production of bathtubs, kitchen sinks, lavatories, etc., and there are numerous smaller and job

visitors coming into the city on any one of the trains arriving after 3 o'clock in the afternoon. If it should happen to be in the winter time and the visitor's train should arrive about 5 o'clock, as he approached the city he could not fall to be impressed by the spouting famous likely ing up the semidarkness al of his train into the city.

with the big foundries, and from 4 o'clock on is the time for taking off the day's heat. Then the cupolas are in full blast, heat. Then the cupolas are in full blast, spewing the gases into the air and libs erating the hot iron into the foundry. Along that railroad track are several thousand men engaged in hustling the iron to the sand molds, and for the greater part of the night negro laborers will be shaking out the castings and getting the sand heaps ready for the next day's moulding.

of its most romantic phases. There is romance aplenty in working with such a primal force as heat, and in torturing the inanimate iron into any one of a thou-sand desired shapes, and this feature of

GOVERNMENT SPENDS QUARTER-BILLION IN THIS SECTION

Nearly a quarter of a billion dol-lars is being expended by the United States government in the erection of immense war industries in Tennessee and Alabama. The powder plant at Nashville will cost \$100,000,000.

will cost \$100,000,000.

The two nitrate plants and the two dams at Muscle Shoais will cost \$105,000,000.

The government is building a five million-dollar wood alcohol plant at Collinwood, Tenn.

In addition there are many millions of dollars being expended by corporations engaged in war work, either directly or indirectly, such as the great expansion of the American Aluminum company at Nashville.

### NETWORK OF EXCELLENT PIKES THREADS HILLS AND VALLEYS

Hamilton County Takes Lead in Providing Best of Communication Facilities - Has Paved City Streets, Concrete Roads, Two Highway Tunnels and Million-Dollar Bridge.

In writing about one's own city or state highway funds, and for its less section it is customary to beast. The chances are that the pages of civic literature have outraged truth more frequently and more flagrantly than he imaginative baron of lurid adven

the imaginative baron of lurid adven-ture ever dreamed was possible, as great a trifler with veracity as he was. But there is one phase of Chatta-nooga and Hamilton county's develop-ment which may be described in su-perlative terms with perfect safety. Hamilton county's road system and the branching network of communica-tions throughout the county deserve the suffix "est" in every respect.

tions throughout the county deserve the suffix "est" in every respect.

Without doubt this county has the finest system of county roads in the state. Few if any communities in the south equal it, and there are not many in the urban sections of the east and north which surpass it. In proportion to population served, Hamilton county's roads may safely be pronounced without a peer.

County Maintains Three Kinds of

In some respects the work of the Hamilton county highway commission parallels that of the streets and sewers department of the city, in that the county has many miles of paved streets having guttering, curbing, sew-ers and street car tracks; in fact, they are merely city streets outside of the corporate limits.

The paved streets in the county sys-tem include nearly all kinds of pave-ment—asphalt, concrete, bitulithic, etc. In addition the county has seven or eight miles of the finest concrete pike roads running through farm and over mountain territory, giving an easy means of communication and travel to large agricultural districts, to the great profit of both the city and farm-

Bird's Mill Road and Wauhatchle Pike important regions have been brought into closer touch with the city through the construction of the most modern concrete thoroughfares, these being the Bird's Mill road and the new Wauhatchie pike, both of which deserve

hatchie pike, both of which deserve special mention.

Construction of the Wauhatchie pike eliminates one of the hardest mountain pulls in the whole section. Before it was built, to get into the rich valley around the foot of Lookout mountain it was necessary to go a considerable distance up the mountain itself. The new concrete pike follows a far gentler grade closer to the foot of the mountain, and, overlooking the toe of the river at Moccasin bend as it does, forms one of the finest scenic drives in the entire south. The grade permits of high-gear operation of audrives in the entire south. The grade permits of high-gear operation of automobiles all the way and branches about haif way up to permit of a concrete approach to the road up Lookout mountain, thus benefiting the dwellers on the heights, as well as those beyond in the Wauhatchie value.

This road was only completed within the last few weeks, and its completion was considered an event of such potential importance that a special the important mining and agricultural dedicatory program was worked out and followed under the auspices of the Chattanooga Automobile club.

The pike was built in part with stringers ridge.

The straightaway Dry Valley road. The important mining and agricultural town of Daisy and beyond to Soddy. The Hixson pike, cherted and machine the pike was built in part with gion on to Hixson.

met in the beginning when the project met in the beginning when the project of improving communication facilities for the dwellers east of Mission ridge was first agitated. The Wauhatchie pike goes over a part of Lookout mountain, albeit the easiest part, while the Bird's Mill road goes under Mission ridge by way of the longest highway tunnel in the world. This tunnel, two-fifths of a mile long, was built in the face of almost staggering difficulties, but immediately proved its difficulties, but immediately proved its worth in the increased value of prop-erty, and through this increase in as-sessments has more than paid for it-

self.

Beyond the tunnel for a distance of three miles east has been constructed a model concrete highway, this work, in contrast to the Wauhatchie pike, being done by convict labor. The latter was handled largely by contract with construction firms. The cost of the Bird's Mill road was borne of considerable portion by the residents of the district served and the rest was borne by the county.

borne by the county.

Another excellent concrete road constructed by the county is Glass street, in East Chattanooga, this being the first concrete highway undertaken by Suburbs Have Regular City Streets.

Chattanooga is a city having urban suburbs. That is, the suburbs, while not being part of the corporation proper, have all the advantages of the city—light, water, gas and streets, including also in many cases sewers.

There are excellent asphalt streets
in St. Elmo, in North Chattaneoga and
other suburbs, and the most ambitious

other suburbs, and the most ambitious piece of paving maintained by the county is the ninety-foot, four-mile Rossville boulevard, which joins up with the recently constructed concrete pike built by the government from Rossville to Chickamauga park.

Much of the valuable territory of Hamilton county lies north of the Tennessee river. The suburb of beautiful homes—Riverview, the Golf and Country club, the town of North Chattanooga, a rapidly developing industrial section; Signal mountain, Baylor school and a great deal of the county's finest farming land, all are across the river, and to provide access to this section the county has just recently completed a \$1,000,000 concrete bridge having the longest basscule lift in the world in the center. This bridge, gocase when going over the old Walnut

nel over there, giving Hamilton county the world's record in maintaining two such tunnels, this one being through Stringer's ridge.

The straightaway Dry Valley road.

The straightaway Dry Valley road.

the most alert counties in the south to foster the building of great inter-sectional highways, such as the Dixle highway, and is now spending a great deal of money completing the Suck creek road, which will be such an im-portant link in the Dixle highway. Construction of this road presents en-gineering problems galore, running as it does straight into the face of the mountain at Walden's ridge, over mountain at Walden's ridge, over which it will go and on down into the Sequatchie valley. This road is being built under the direction of a special commission with state aid, much of the work having been done by state

convicts.

When completed it will be one of the master scenic routes in the world, with every variety of mountain and

County Has Large Road Investment Hamilton county has probably put a greater amount of money into high-ways, bridges and culverts than any other county in the south. An inventory taken several years ago shows an investment of \$50,000 in the item of culverts alone, and the two bridges will run well beyond the million and a half mark. Taking it all in all, Hamilton coun-

ty's prosperity and popularity can largely be accounted for on the score of good roads. The county system itof good roads. The county system it-self gives every facility to the farmer and the automobilist, and when the county system is added to the magnifi-

# **NINETY-SIX MILES STREET** RAILWAY THREAD VALLEY

Two Traction Lines Extend Facilities to the Many Mountain and Suburban Colonies.

The beauty of Chattanooga's scenic surroundings and the fondness of its citizens for living on the heights have created an unusual transportation sit-uation, both with reference to automobile roads and traction systems, and have resulted in the accomplishment of some remarkable engineering feats in getting lines of travel to the far-flung

nountain colonies.

Visitors to the city are immediately amauga park at a distance of several miles from the city; so that, in order to reach these places, it is necessary to have a street railway mileage considerably out of proportion to the pop-

Chattanooga has two traction com-panies operating ninety-six miles of

The Chattanooga Railway and Light company is the urban transportation agent proper, though its lines run to Lookout mountain, Chickamauga park and other distant points. The Chattanooga Traction company operates two lines, both of a semi-interurban tracrdinary number of downtown din the character, one going to the top of Signal mountain and the other to Red Bank, about eight miles up the valley and historic attractions of the city.

Turning off from the Dry Valley road at Valdeau, another asphalt mac-adam road leads to the foot of Signal mountain, and is joined there by the truly wonderful automobile boulevard These two companies give the city a sense of unusual satisfaction was extending transportation facilities to sections and points which must needs be up the mountain to the hotel.
Reads Built to Jein Great Highways.
Hamilton county has been among
the most alert counties in the south

undeveloped without them.

The Chattaneoga Railway and Light company operates thirteen lines in addition to the incline and the troiley line up Lookout mountain. These lines line up Lookout mountain. Proceedings and reach to the important suburbs and reach to the important suburbs to Chicka Both the incline and trolley lines up Lookout mountain are noteworthy accomplishments. The incline is by way of being nationally famous, running as it does straight up the mountain side, following exactly the contour of the slope. This is not only the longest but the steepest incline in the world, and is guaranteed to give a thrill to the most weary and satisted traveler. The trolley line runs by a more circultous route, coming on top of the mountain by the old Mountain house and proceeding along the top to the incline station and the point. The combination of the trolley line and the incline gives tourists the opportunity

incline gives tourists the opportunity of going up the mountain one way and down the other and thus obtaining the widest range of view, and offers residents along the side of the mountain a direct route from their homes to the

Signal Mountain and Red Bank. owned by the Signal mountain development interests, was primarily formed with the idea of promoting those developments, but the lines built and operated by that company have served to do far more than that. All of the territory north of the river between Chattanooga and Signal mountain has been greatly enhanced in value because of the new system and the heaviness of the rails has permitted the transportation of bulky freight, thus permitting the development of a flourishing industrial community north of the river. The C., N. O. & T. P. connects with the lines of the Chattanooga Traction company and over the nooga Traction company and over the latter are hauled coal and various raw materials to the eight or ten large factories which have grown up in North Chattanooga. In addition the auburb of North Chattanooga is partially auturning with coal from the tially supplied with coal from the mines on Signal mountain, the fuel coming over the lines of the traction

Company.

The passenger cars on this system running both to Signal mountain and Red Bank, are of the heavy, high-speed, interurban type, having side entrances and large carrying capacity.

#### NUMBER OF RESTAURANTS PROVES CITY'S POPULARITY

One of the most eloquent commentaries ipon the number of people who pass through Chattanooga daily, as tourists and business men, is found in the large number of downtown restaurants. One might be led to think that Chattanooga people never eat at home, but the large floating population is the reason for this There are twenty down-town restauand all but one or two of these have been here since before the encampment came to Chickamauga park, so there can be no question of expansion due to that

a large proportion of the guests have been soldiers, but the reason for the ex-traordinary number of downtown dining rooms lies in the demand imposed by

## HIGHWAY TRAVEL BY MOTOR INCREASES

McAdoo Calls on Public to Refrain From Using Railroads Where Possible.

Washington, D. C., Aug. 31 .- Highways travel by means of the passenger automobile has increased during the present summer fully fifty per cent., according to figures which have been compiled by the national road bureaus at the A. A. Washington and New York headquarters. The in-creasing number of road journeys has resulted from over-crowded trains and the difficulty of assured accom-modations and conveniences except to a comparatively limited number of While a percentage of the travelers. While a percentage of the road trips have had to do with vacation periods, a preponderating quan-tity has related to commercial necessities and a consequent saving in time obtained by uninterrupted door-to-

door trips. Director General of Railroads Mc-Adoo has just issued a statement in regard to railroad travel, calling upon the public generally to use passenger-train service at the lowest possible minimum. Mr. McAdoo thus presents the case: "Among the many patriotic duties of the American public at this the case: "Among the many patriotic duties of the American public at this time is the duty to refrain from trav-eling unnecessarily. Every man, wom-an, and child who can avoid using passenger trains at this time should do so. I earnestly hope that they will do so."

Chairman Carl G. Fisher, of the A. A. A. touring beard, makes this comment upon Mr. McAdoo's plea: "With rail lines congested by essential freight haulage, it certainly is the duty of everyone to cut down the use of this utility, and, of course, the only answer is the highway and the self-propelled which now can show anew its vehicle, which now can show anew its ability to abridge distances and quickly transport people from one place to another in the necessary transaction

of their daily duties. of their daily dities.
"In the middle west it is the expected thing for the average passenger car owner to employ his Tchicle pected thing for the average passenger car owner to employ his vehicle in practically all of his town to town journeys, whether they be within the state or into an adjoining commonwealth. The situation has demonstrated unequivocally the great need in every state of a state plan of state-built and state-maintained highways, and if the country as a whole were thus equipped at the present time, it would mean the saving of millions of dollars, which could be invested in liberty loans and other helpful forms of financing the great expenditures

or manning the great expenditures which we must meet.

"It is my belief that every American soldier who returns from Erance, after having personally seen and traveled over its great highway system, will be a forceful and persistent advocate to establish a similar situation in our country, even though it be many times the size of the prosperous pation times the size of the prosperous nation which has benefited so thoroughly from the good roads wisdom of a cer-tain Napoleon Bonaparte."

Eisie Janis Oversess.

Miss Eisie Janis, famous American
comedienne, and Polin, a noted French
impersonator, are two of the artists are entertaining soldiers



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